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PUBLIC LANDS

BUREAU OF LAND MANAGEMENT



OUR PUBLIC LANDS . . .



"Conservation is a state of harmony between men and land. By land is meant all of the things on, over, or in the earth. Harmony with land is like harmony with a friend; you cannot cherish his right hand and chop off his left. That is to say, you cannot love game and hate predators; you cannot conserve the waters and waste the range; you cannot build the forest and mine the farm. The land is one organism. Its parts, like our own parts, compete with each other and cooperate with each other. The competitions are as much a part of the inner workings as the cooperations. You can regulate them—cautiously—but not abolish them."

(From "Round River—From the Journals of Aldo Leopold," edited by Luna B. Leopold, Oxford University Press, 1953.)

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COVER

Water, wood and timber products, minerals, fish, wildlife, beautiful scenery, and recreation—all these are the resources which the BLM manages for all the people on O&C forest lands of western Oregon. For more on the progress of 20 years of management of these lands, see page 4.

PHILIPPINE GOVERNMENT HONORS BLM

The Bureau of Land Management has been honored by an award from the Philippine Government.

In a letter received by BLM Director Edward Wootzley, Mr. Zoilo Castrillo, Philippine Director of Lands, explained that the Bureau of Land Management was awarded a certificate of merit "in view of its valuable cooperation and genuine interest in assisting the Bureau of Lands which is one of the Bureaus of the [Philippine] Department of Agriculture and Natural Resources".

Award of the certificate of merit to the Bureau

of Land Management was made by the Secretary of Agriculture and Natural Resources, Mr. Juan de G. Rodriguez, at a ceremony August 30 in Marble Hall in Manila.

According to the official award notification, the certificates of merit were made to "outstanding citizens and private firms who have helped the Department of Agriculture and Natural Resources" in promoting the development of Philippine agriculture and natural resources. The Bureau of Land Management was the only Government agency to receive a certificate.

End

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF AGRICULTURE AND NATURAL RESOURCES

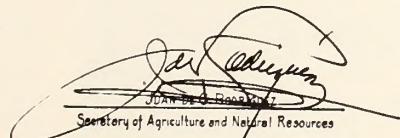
To All Whom This May Come, Greetings:

Be it known that BUREAU OF LAND MANAGEMENT, USDI, WASHINGTON, D.C., having rendered
meritorious services in the field of LAND MANAGEMENT FOR TRAINING LANDS EMPLOYEES
IN U.S.A. - - - - - has accordingly been awarded this



by the Staff and Personnel of the Department of Agriculture and Natural Resources.

In Witness Whereof, we have caused this Certificate to be signed by
the Secretary of Agriculture and Natural Resources and the Seal of the
Department of Agriculture and Natural Resources to be hereto affixed at
Manila, Philippines, this 30th day of August Nineteen Hundred and
Eighty-seven.


JUAN B. G. RODRIGUEZ
Secretary of Agriculture and Natural Resources

FORESTS FOR TOMORROW

by Gerard F. Horne, Forestry Officer, BLM

"... FOR PERMANENT FOREST PRODUCTION . . ."

With these words, written into law just 20 years ago, the Congress ushered in a new era in American forest management. For this was the beginning of sustained yield forest management on nearly 2½ million acres of forest lands on the slopes of the Coastal Range in western Oregon.

These lands are the remnants of a 3,728,000-acre land grant made in 1866 to the Oregon & California Railroad Co. They are usually referred to simply as the "O&C" lands.

Under the terms of the 1866 grant, the railroad company was to receive all of the odd-numbered, nonmineral sections in a strip of land extending 20 miles on each side of the railroad right-of-way.

Because much of the land within the 40-mile strip was already in private ownership, the company was granted additional odd-numbered sections in a strip extending 10 miles farther on each side of the original grant. In all, the grants totaled about 3,728,000 acres of public-domain lands.

Like other grants made to the railroads during the 19th century, the lands were to be used as a source of revenue for the railroads to promote the development of the Nation's railroad system.

Disposition of the lands by the railroad company was restricted by three conditions. *First*, the lands were to be sold to people who would actually settle on and develop the lands—they were not to be sold to land speculators. *Second*, no more than 160 acres were to be sold to any one settler. And, *third*, none of the lands were to be sold for more than \$2.50 an acre.

As time passed, all three of these conditions were violated. After years of legal actions in the courts, extending to the Supreme Court, in 1916 the Congress revoked the grant and returned (revested) the lands to the United States. The revested lands (all of those not sold by the company) totaled approximately 2,891,000 acres.

The Revestment Act required that the O&C lands be classified as power sites, timberlands or agricultural lands, and set the stage for eventual liquidation of all those lands. The timberland classification included those supporting more

than 300,000 board-feet of timber per 40-acre subdivision. Lands with a lesser amount of timber were classified as "agricultural" and were subject to entry under the general provisions of the homestead law.

This plan met with little success because the majority of lands with real agricultural value had previously been homesteaded or purchased from the railroad.

The cutover lands, denuded of timber in some areas, generally remained in Federal ownership—as did the virgin timberlands.

Income from the liquidation plan was meager and arrangements for in-lieu taxpayments to the O&C counties faltered. In the process, valuable timber resources were being removed from lands primarily suited for forestry with no provisions for growing a new crop of trees.

By the mid thirties, it was obvious that the liquidation policy was unsatisfactory. Congress, county officials, private industry, public-spirited citizens, and the Department of the Interior began searching for a remedy.

Following public hearings in Oregon (and later in Washington, D. C.), Congress enacted the O&C Sustained Yield Act on August 28, 1937. This act provided for permanent forest production on the remaining 2,516,000 acres of O&C lands and the 74,000 acres of Coos Bay Wagon Road grant lands.

The history of the CBWR lands is similar to that of the O&C lands.

The lands were originally granted to the State of Oregon for the construction of a wagon road from Roseburg to Coos Bay with similar stipulations as were contained in the O&C grant. The State transferred the grant to the Southern Oregon Co. Terms of the grant were violated and the lands were reconveyed to the Federal Government by act of Congress in February 1919. Of the original 105,000-acre grant, approximately 98,000 were reconveyed. Later sales reduced this acreage to the present 74,000 acres.

To carry out the provisions of the Sustained Yield Act, the O&C Revested Lands Administration was established in 1938 under the General Land Office in the Department of the Interior. A

headquarters office was set up in Portland with district offices in Portland (later moved to Salem), Eugene, Roseburg, and Medford.

By 1945 a fifth district office had been opened at Coos Bay and the staffs had increased to four foresters and a secretary.

Consolidation of the General Land Office and Grazing Service in 1946 placed the O&C administration in the Bureau of Land Management. Today each of these five district offices have approximately 40 professional foresters.

The interests of local communities and industries and other potential users of the O&C lands and resources have had a prominent role in their administration during the past 20 years. The O&C Advisory Committee formed in 1938 was composed of representatives of the lumber industry, State and local governments.

This committee was re-formed in 1948 by including representation of other groups and the general public and renamed the "O&C Advisory Board." It advises BLM on general policies of administration and the development of new plans, rules, and regulations in furtherance of the concept of the O&C Act. Local advisory boards serve in a similar capacity for each of the five districts.

Accurate and up-to-date knowledge of basic data for the lands and resources is necessary for sound resource management.

Beginning in 1938 the entire O&C and CBWR acreage was reexamined to determine as accurately as possible which lands were agricultural in character and which were forest lands. This reclassification established the basic data necessary to embark on a sustained yield program. After this reclassification the first local sustained yield plans were prepared.

In 1946 and 1947 the O&C lands were subdivided into local sustained yield areas (called Master Units), designed to contribute to the economic stability of local communities.

By 1949 continuing technological and economic changes had demonstrated a pressing need for new standards for forest resources measurement. In this same year BLM increased its forest inventory program through the use of modern aerial photographic techniques. The inventory is scheduled to be completed in 1959.

Maps for the entire O&C area, including intermingled private lands, will show the location, extent, and content of all classes of forest stands. Much of this mapping has been accomplished with the participation and cooperation of the owners of the intermingled lands and local county governments. Using new, more advanced methods now being developed, the next inventory of the O&C resources to begin in 1960 will include soil and land-form data as well as that for vegetation.

Development of suitable access has long been recognized as a major factor in protection and

(Continued on page 12)



OUT OF THE WOODS. Skidding pine logs toward the loading site.



TO THE MILL. Enough lumber in one load for a medium-size house.

ACCESS ROADS. Heavy-duty roads open up new areas to intensive logging, recreation, and fire protection.



SCRIP RECORD BOOK CLOSED

(Reprinted by special permission. From the August 11, 1957, Washington (D. C.) Post and Times Herald)

by JOEL D. WOLFSOHN, former Assistant Secretary of the Interior and Assistant Director of BLM

Another chapter in the long and colorful history of this Nation's once-sprawling public domain closed last Monday with expiration of the deadline for recording scrip—a sort of land currency redeemable in Uncle Sam's vast acres—with the Bureau of Land Management.

The law, enacted August 5, 1955, provides that all unrecorded scrip is no longer redeemable for land. But this opens a new chapter: Whether Congress can so simply deprive a scrip owner of his rights may well be challenged.

For the story of scrip is part and parcel of the story of America's push to the Pacific, the conquest of frontier after frontier, the settling of the land. All in all, the United States has given some 95 million acres of land to owners of various kinds of scrip—an amount representing about one-tenth of the land sold and given away by Uncle Sam since the beginning of the Republic and about one-twentieth of the total land area of this country.

But lest a scripholder be concerned that there may not be enough land left to satisfy the comparatively few outstanding bits of scrip, it should be borne in mind that the Government still owns 412 million acres of public domain in the States and 365 million acres in Alaska.

Scrip was issued over the past 100 years for many reasons, one being for patriotic service which Congress believed worthy of compensation. On February 14, 1855, for instance, Congress got around to granting scrip worth 1,920 acres to Reese A. P. Gerard, William Gerard, and Rachel Blue (formerly Gerard), the only children and heirs of Joseph Gerard.

The statute grants three sections to the "only children of Joseph Gerard, a messenger of the United States to the Indians, who was killed in 1792 . . . in accordance with the spirit and inducements authorized by President Washington to be held out to such persons as would consent to carry a message from Ft. Washington, now Cincinnati, in 1792, to the hostile Indians of the then Northwest Territory."

About 400 acres of the Gerard heirs' 1,920 acres is still outstanding, after more than a century.

Congress—or treaties with the Indians—also authorized the issuance of scrip in payment for land; in substitution for land otherwise used by

the United States and thus not available to its settlers, and for other kinds of obligations for which compensation was deemed necessary.

In the old days, scrip was handled almost like money. There has been, at various times, a very active market in the numerous types of scrip. Men made a business of buying and selling it. Others collected it in the hope that as public-domain values went up, they could "apply" the scrip for desirable land. Scrip certificates or warrants with a nominal value of \$1.25 changed hands at up to \$25 or \$30 an acre.

An owner of scrip had only to go to the nearest Land Office (and there were many in the public land States, which were all the States except the original 13 and Texas) and choose the land he wanted. In lieu of settling on it and cultivating it—and instead of paying cash—he simply paid for it with a scrip certificate.

If the certificate was for more acres than were selected, either a new certificate was issued or a proper notation was made on the back of the original certificate.

Most certificates weren't good for mineral lands; many were good only in certain States. But large quantities of land were available to scrip-holding frontiersmen, wherever their paths led.

Their claims for land dribbled into the old General Land Office for years; then came the claims made by persons who inherited scrip or bought it. They have always been a frustrating sort of problem to what is now the Bureau of Land Management. For instance, how much scrip was outstanding wasn't known until the act of August 5, 1955, required recordation. Now, some 30,000 acres worth of scrip of one kind or another has been recorded.

The scrip falls into 13 categories, most of it "Soldiers' Additional." Other large categories are "Military Bounty" and "Sioux Half-Breed."

It is a varied group which has recorded scrip with the Bureau. Some is held by large corporations; some by individuals. E. L. Cord, financier and a man whose name once was large in automotive circles, is the owner of record of a substantial amount of Soldiers' Additional, Valentine, Wyandott, Porterfield, and Isaac Crow scrip.

The City of Los Angeles, Department of Water and Power, and the Pacific American Fisheries o

Bellingham, Wash., are other owners of Soldiers' Additional scrip. Interestingly, each owns a piece of scrip representing the smallest amount recorded with the Bureau—scrip worth three one-hundredths of an acre, or a piece of land 36 by 36 feet.

Soldiers' Additional scrip was issued under an act of 1901 which decreed that any soldier of the Civil War and subsequent wars who had homesteaded less than 160 acres could have an additional homestead for the acreage required to make his total holding 160 acres.

These rights were assignable and thus salable—but they are inchoate rights. The magnitude of their applicability is something the Bureau of Land Management does not know. There are those who question the validity of the 1955 law outlawing this direct grant or gift of land to former soldiers and settlers.

There was, too, the treaty of 1830 with the Choctaw Indians. Under its terms, the Choctaws were given 1,029,000 acres of land, in scrip. How much, if any, of this is outstanding is not known.

Another treaty provided for members of the Sioux Tribe who were of mixed blood. This scrip—Sioux Half-Breed—totaled at least 321,000 acres. Some 2,000 acres of it is still in the hands of known, and unknown, persons. Only about half a dozen claimants recorded their scrip under the 1955 law.

Other types of scrip—Supreme Court, Surveyor General, Forest Lieu—resolved discrepancies in land holdings caused by faulty surveys, applications, errors in descriptions, and withdrawals of land for forest or other purposes.

It was Agricultural College scrip which gave the establishment of State agricultural and mechanical colleges—land-grant colleges—a big boost. Their beginnings lie in the act of July 2, 1862, which gave each of the 34 States 30,000 acres for each Senator and Representative.

There were then 264 Members of Congress, which resulted in a gift of 7,920,000 acres of non-mineral land. This scrip was to be sold and the proceeds used to establish the colleges. States were to apply this scrip within their own borders, but if they didn't have enough land they could go to other States, provided they didn't take more than a million acres in any one other State.

All manner of problems and debate attended the issuance of such large quantities of scrip. Those problems continue to this day, and Bureau of Land Management Director Edward Wozzley and the Interior Department probably will be plagued with them for some time to come.

One difficulty turns on scrip's nominal value of \$1.25 an acre. There are those today who believe scrip has a substantially higher value. And the 1955 law, while requiring that scrip be recorded, did not specify any time limit on the utilization of the recorded scrip.

All the while, of course, every public domain continues to increase in value. If a scrip owner is to be paid, rather than given land, should

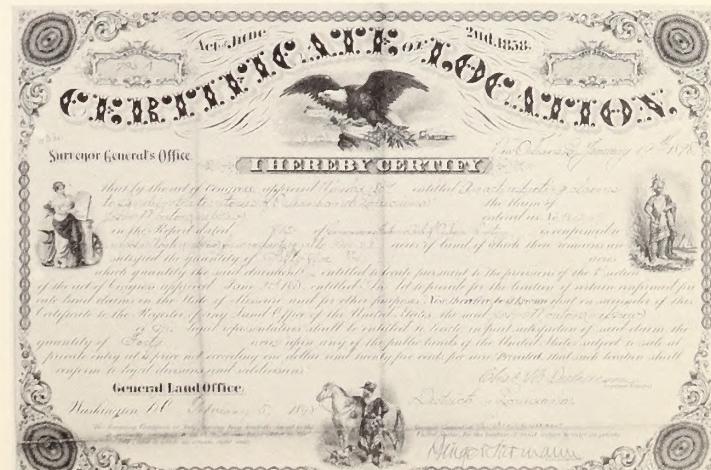
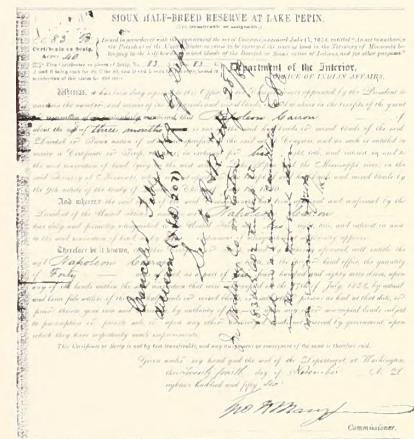
he be given \$1.25 an acre or the current value of the public-domain land which he would select?

In any event, it seems that the 1955 law may have closed a chapter on scrip, but not the book. And while the law has brought a certain kind of audit and order out of the chaotic and formless scrip account on Uncle Sam's gigantic land ledger, there is still much to do before this part of the public domain story can be stored away in the archives.

End

Kind of scrip	Appropri- ate acreage recorded	Number of pieces of scrip recorded
Wyandotte Certificates (1842)	209	6
Military Bounty Land Warrants (1850)	240	3
McKee Certificates (1853)	200	5
Sioux Half-Breed Certificates (1854)	360	5
Gerard Certificates (1855)	400	10
Military Bounty Land Warrants (1855)	760	6
Porterfield Warrants (1860)	435	11
Soldier's Additional Rights (1872)	6,322	285
Valentine Certificates (1872)	2,333	69
Forest Lieu Selection Rights (1897)	5,073	61
Railroad Lieu Selection Rights (1898)	541	18
Isaac Crow (1907)	80	1
Merritt W. Blair Selection Rights (1926)	80	1
Total	17,036	481

TYPICAL SCRIP. These two samples of public land scrip are typical of the many kinds issued by the Government. At right is Sioux-Half Breed (1856). Below is Surveyor General's Scrip issued in 1898.



PREFACE TO FOREST MANAGEMENT

The earliest settlements began in the timber region, and where the felling of the forest was a necessity to make way for the plough.

We have now reached a period when the demand for timber is rapidly on the increase, and the supply diminishing. Settlements, too, are approaching the treeless regions of the plains.

By what agency western prairies and the country beyond have been denuded, it is useless to speculate. Experience has established the fact that those regions, by protection from fire and proper care, may be covered with a growth equal to the wants of settlers, and may be continually renewed for all time. In fact, it is known in places in Ohio and Illinois that where the land is protected from fire and other causes destructive of culture, there is a spontaneous growth of timber.

The demand, however, as stated is undoubtedly increasing to an enormous extent, the States which appear to have at present an abundance in higher latitudes being those bordering on Lake Superior and Lake Erie, comprising the northern parts of Michigan, Wisconsin, and Minnesota; yet even there the supply is so diminishing as to be a matter of serious concern.

Projects have been suggested for planting and rearing forests; and yet, while all descriptions of

timber are becoming scarce in settled communities, and more expensive, it is nevertheless the conviction that the evil may be lessened by proper effort in all the States east of the Great Plains, and even in those plains the grand forests of the Cascade region will furnish supplies, until the science of arboriculture may clothe such treeless localities as are not appropriated to cereal cultivation.

A modern writer of eminence ventures the assertion that, with proper care and protection, even inarable territory and sandy deserts, as in Arabia and Africa, might in places be covered with forests, the theory not being inconsistent either with experience or the deductions of science. In fact, many acres in the Scioto and Miami Valleys, in Ohio, are today covered with a thrifty timber growth sufficient for fuel and fencing which 30 years ago were entirely destitute. It is stated that timber is becoming sufficiently abundant for domestic uses in that State, where the land at the period of first settlements was without trees, and in the ordinary parlance of the times was known as "the barrens"; the process of timber cultivation being now in fact silently going on in the States of the West as well as those in middle latitudes.

SEEDLINGS. These 2-year-old seedlings will one day be a forest crop for harvest.



AIR EXPRESS. Large areas are seeded by helicopter, reducing programs.



The method of planting and rearing trees is reduced to a science, the peculiarities of localities best adapted to different species having been ascertained. It is known that the pine and fir tribe are generally grown on sandy, shallow surface soil; other trees are natives of swamps; while the oak, hickory, chestnut, and others of harder and more solid growth exist in natural and better soils suited to their several peculiarities.

Such is the case with wild fruit trees, which have been changed into improved fruit-bearing orchards through the teachings of vegetable anatomy and physiology. The homestead settlers, or other parties upon whom the legislative department may lay its injunctions, can select seed or young growth best adapted to the soil in hand, little labor being required for forest or ornamental trees which naturally grow in wild and uncultivated territory. The variety of soils existing in the public lands afford ample opportunities for encouraging this culture, and, under the requirements of law in the interests contemplated, may lead to valuable results in causing the product of the cultivated forest to make good the deficiency created by the rapid advance of settlements and necessary destruction of the forests of the wilderness; also supplying timber wants in treeless territories.

End

There is early evidence of the benefits from scientific forest management in this short essay written nearly a hundred years ago. Containing many of the elements of modern American forestry, this appeared in a section of the Annual Report of the Commissioner of the General Land Office called the Importance of Promoting the Planting and Growth of Trees. The year was 1866.

End

costs of large-scale reforestation

NURSERY. Millions of young trees are grown in nurseries, to be planted on many thousands of forest acres each year.



SEED TREES. The trees on the ridge top seeded this burned area.



CENTURIES OLD. As old-growth stands are harvested, reforestation assures a future supply of timber products.





SEEDING EQUIPMENT DESCRIBED

A new and revised edition of the *Range Seeding Equipment Handbook* is now available. This publication contains a description of equipment adapted or designed for use in range seeding and noxious range plant control. It was prepared by the Range Seeding Equipment Committee and published by the U. S. Department of Agriculture and the Department of the Interior. The *Handbook* is available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., at \$1.25 per copy.

FIRES YIELD TO AIR ATTACK

While the shovel and Pulaski are still basic tools of firefighting and will be with us for a long time, wings take the backache out of firefighting. There have been some surprising advances in aerial means of fire suppression and control. Extensive testing in the application of water and chemicals has been done by the Division of Fire Control Research in the Forest Service, but it took some ingenuity on the part of a young range manager and the cooperation of an aerial crop sprayer to put aerial water drop into successful practice on one grazing district in Oregon.

Last spring after observing the aerial water-drop demonstrations by the Forest Service and the California Division of Forestry at Reading, Calif., District Manager Euel Davis, Baker, Ore., got an idea. After crop spraying and dusting had been finished for the season, Davis approached one of the local pilots with the idea of using his small plane to spray water on a grass fire.

The men removed the nozzles from the spray booms to release a larger volume of water, making it possible—in several passes over a fire—to slow

down the blaze sufficiently to permit the pumper units and crews with handtools to move in. To increase the effectiveness of aerial application of water, the pilot devised a different type of spray boom to increase the output several times—thus only 1 or 2 passes over a fire was sufficient to permit the ground crews to take over. This is only one instance where an alert individual has put into practice principles of the water drop which have been developed through research. Several companies are now ready to contract with the Government for aerial application of water or chemicals on wildfires.

The ground crews with shovels and Pulaskies will probably always be a part of fire suppression, but these new aerial techniques are very promising in the reduction of big flames to the point where conventional methods can control them.

NEW REGULATIONS PROPOSED FOR OIL AND GAS LEASING ON WILDLIFE LANDS

A new policy restricting oil and gas leasing on Federal wildlife lands would be the result of proposed regulations announced by Secretary of the Interior Fred A. Seaton. The regulations would forbid leasing on certain wildlife lands.

The proposed regulations would establish departmentalwide policy and procedures dealing with oil and gas leasing on public lands reserved for wildlife conservation purposes.

The regulations recognize four separate classes of wildlife lands. These include wildlife refuges, game ranges, Alaska wildlife areas, and Federal-State cooperative lands. The latter category includes lands made available to the States through joint agreements between the Federal Government and State game commissions.

Under the proposed regulations, all oil and gas leasing would be forbidden on wildlife refuge

lands under complete jurisdiction of the United States Fish and Wildlife Service, except where the Government has determined that the lands are being drained of oil and gas by nearby wells.

If the Geological Survey, an agency of the Department of the Interior, determines that those lands are subject to oil drainage from operations on adjacent lands, the Bureau of Land Management may, upon concurrence of the United States Fish and Wildlife Service, process an offering inviting competitive bidding. Leases for such lands would be issued only upon approval of the Secretary of the Interior and would contain such stipulations as are necessary to assure that activities on oil and gas development would not damage wildlife resources. There are an estimated 4,418,000 acres of wildlife refuge lands in the continental United States.

One game range lands, the administration of which is carried out jointly by the Bureau of Land Management and the Fish and Wildlife Service, it would be the responsibility of these two agencies to determine any area that would not be subject to oil and gas leasing. Under the proposed regulations these special areas would be treated the same as lands in an established wildlife refuge. The remaining lands in each game range would be open to oil and gas leasing under such conditions as are determined necessary to insure that leasing activities and drilling will not interfere with the value of lands for game range purposes. Under the regulations any areas that are closed to oil and gas leasing within a game range will be shown on maps available to the public. Game ranges embrace an estimated 4,616,000 acres.

Oil and gas leasing on Federal-State cooperative lands and on Alaska wildlife areas would be handled under the same principles as game range lands. Any areas in which leasing would be forbidden, except when there is drainage present, would be determined by the agencies having jurisdiction over the lands. The remaining lands in these areas would be open to oil and gas leasing under such stipulations as are deemed necessary to protect wildlife resources. There are approximately 502,000 acres in Federal-State cooperative areas and about 7,885,000 acres within Alaska wildlife areas.

The new regulations will be published in final form after the Department has had time to study any comments people may submit on the proposal and after a public hearing scheduled for December 9 in Washington, D. C.

GOLDEN SPIKE NATIONAL HISTORIC SITE

A 7-acre tract at Promontory, Box Elder County, Utah, containing the site where a golden spike was driven on May 10, 1869, in a colorful ceremony signifying completion of the Nation's first trans-

(Continued on page 15)

A SHORT LIST OF PUBLIC LAND TERMS—2

Additional homestead entry: A homestead entry which is made by an individual for public lands additional to those he had already acquired under the homestead laws, the total area covered by his original homestead and additional homestead entries not exceeding the maximum area allowed for the class of homestead entry involved.

Animal-unit: A standardized unit of measurement for range livestock which is equivalent to 1 cow or 5 sheep or 5 goats, all over 6 months of age.

Animal-unit-month: The amount of forage which is necessary for the complete sustenance of 1 animal-unit for a period of 1 month; also, a unit of measurement of grazing privileges within grazing districts which represents the privilege of grazing 1 animal-unit for a period of 1 month.

Appropriated public lands: Original public-domain lands which are covered by an entry, patent, certification, or other evidence of land disposal; for certain purposes, public lands which are within a reservation; which contain improvements constructed with the aid of Federal funds; or which are covered by certain classes of leases.

Assessment work: Work required to be performed annually by the claimant, in order for him to maintain a possessory right to a mining claim for which a patent has not issued.

Bonus: A lump sum paid to the United States by the successful bidder for a mineral lease, such payment being in addition to the rents and royalties specified in the lease.

Desert-land entry: An entry of irrigable arid agricultural public lands under the act of March 3, 1877, as amended, which the entryman reclaims, irrigates, and cultivates in part and for which he usually pays \$1.25 per acre.

Disposal, land: A transaction which leads to the transfer of title to public lands from the Federal Government.

Grazing capacity: The total number of animal-unit-months which are available from a given tract of land in 1 year.

Grazing fee: The amount of money which is charged for one animal-unit-month on grazing-district lands; also, the total amount of money which is charged an operator on account of his grazing allotment or crossing permit.

Grazing lease: A lease which authorizes the use of public lands outside of grazing districts (Taylor Grazing Act) for the grazing of livestock for a specified period of time.

Homestead entry: An entry initiated under the homestead laws, which provides for the issuance of patents to entrymen who settle upon and improve agricultural public lands.

Lieu selection or indemnity selection: A selection in exchange for which the applicant relinquishes his rights or title to other lands which he for some reason cannot or does not wish to acquire or hold.

Lode claim: A mining claim embracing public lands which contain minerals occurring in a vein or lode.

Reclamation homestead entry: A homestead entry, not exceeding 160 acres, initiated under the act of June 17, 1902, which provides for the homesteading of public lands within reclamation projects.

Trespass: Unauthorized use of Federal lands or resources.

FORESTS FOR TOMORROW

(Continued from page 5)

management of the O&C lands.

In 1950 an access road construction program was initiated to provide access to O&C timber in drainages which contained a majority of O&C timber and where road construction costs were such that sale-financed roads would have required excessively large timber sales. Early efforts were directed to opening up drainages containing large volumes of salvage timber resulting from the 1951 blowdown and subsequent bark beetle epidemic. The lower Smith River drainage in western Douglas County is representative of these efforts.

Beginning in 1952 the O&C counties agreed to contribute up to one-third of their share of O&C receipts for an expanded road construction program. Through fiscal year 1957, \$17,256,000 has been appropriated for construction and purchase of heavy-duty mainline access roads. Utilization of these funds has resulted in faster development of a complete road network serving both the O&C lands and intermingled private lands.

More than a thousand miles of access roads have been built under O&C timber sale contracts. Allowances for construction of these roads are included in the timber sale appraisals. Approximately 150 miles of additional construction is being done annually by this means.

Purchasers of O&C timber have been authorized to use about 1,200 miles of privately owned roads under the terms of reciprocal right-of-way agreements. These agreements provide that the O&C timber will bear a share of the cost of building the private roads which serve it.

Purchasers of O&C timber to be transported over private roads reimburse the capital investment of the road owners in proportion to the total amount of timber which probably will be hauled over the road. Purchasers also pay a share of the costs for maintaining the road in serviceable condition. Reasonable allowances for these costs are included in the appraisals of O&C timber offered for sale. When the Government's share of the road construction costs has been paid to the road owner, no further payments for use of the road by purchasers of O&C timber are made.

Roads owned by the Government provide ac-

MULTIPLE-USE MANAGEMENT. On a mixed pattern of land ownership, farm and forest meet. Notice the understory of young trees against the background of mature timber.



cess to private timber as well as to Government timber. Persons who haul private timber over public roads are required to pay a road-use fee. All the construction costs chargeable to the private timber which probably will be hauled over the road have been paid. A part of the road maintenance costs must also be borne by the private timber owners using the Government road. After the capital investment has been paid by the private timber, use of the Government road is permitted without charge other than for road maintenance.

New inventory data, access roads, and additional staffing have permitted a rapid, orderly expansion of the O&C timber sales program. During the past several years the full allowable cut has been offered for sale. The annual allowable cut for the O&C lands is now 692 million board feet, with prospects of an annual allowable cut of at least 750 million board feet within the next few years.

Current inventory data show that the O&C lands now support at least 50 billion board feet of timber, or enough to build 5 million two-bedroom homes. This amount is 5 billion board feet more than the quantity estimated to be on these lands before commencement of scientific forest management 20 years ago.

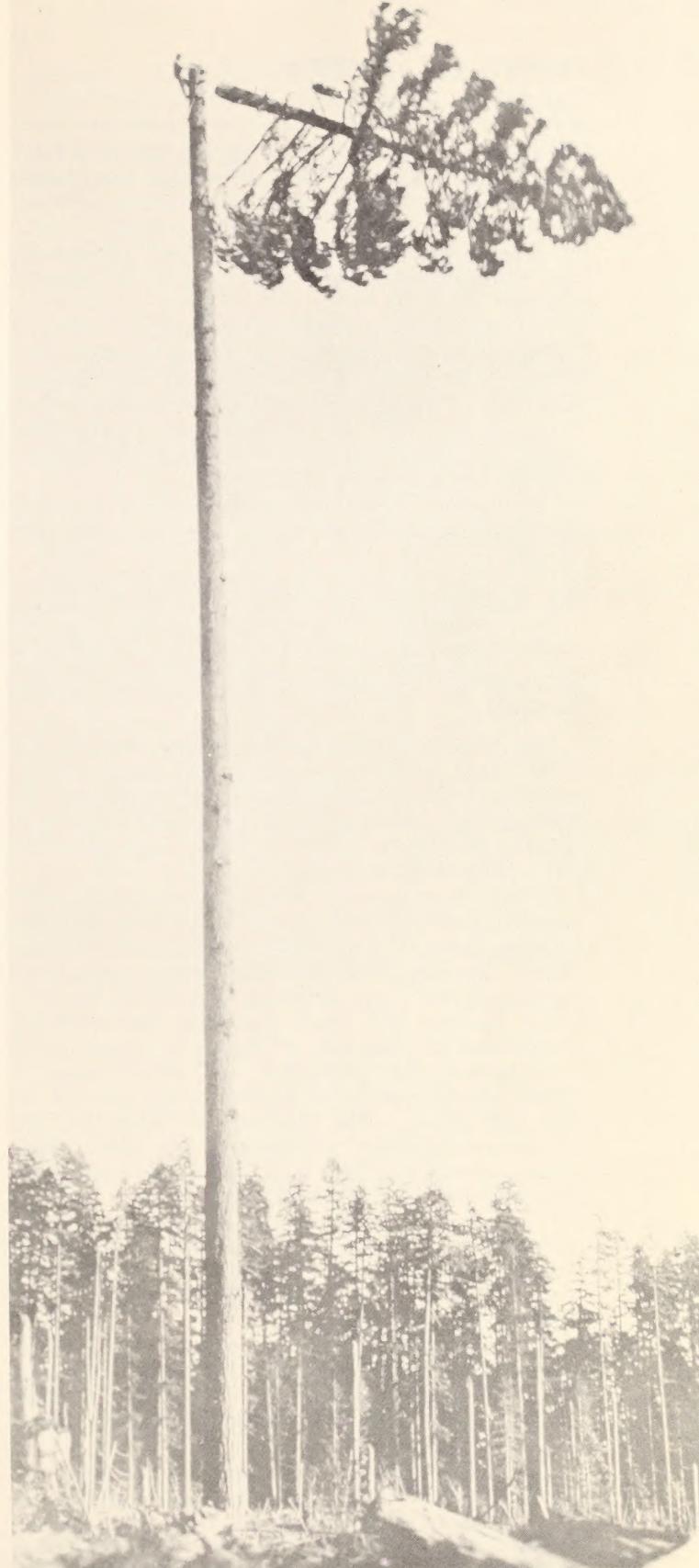
Prompt, natural regeneration of commercial species on the O&C lands requires a number of favorable conditions—abundant seed, suitable site, adequate moisture and protection from fire and other hazards. Such conditions occur too frequently to make natural regeneration economically practical in many areas.

Reforestation of cutover or burned over O&C lands by planting nursery grown seedlings was initiated about 20 years ago when members of the Civilian Conservation Corps planted more than 5,000 acres. Since that time more than 33,000 acres of similar lands have been seeded or planted. Of this amount, approximately 20,000 acres have been reforested through use of appropriated funds and 13,000 acres by purchasers of O&C timber sale contracts.

A concentrated effort to place another 200,000 acres in full production was initiated in July 1957. This greatly expanded effort has been made possible through the joint efforts of the Bureau and the O&C counties. Funds available for reforestation of O&C lands during fiscal year 1958 total over \$1 million. Of this amount, \$900,000 is being contributed by the O&C counties from funds which would otherwise be distributed to them from receipts for sale of O&C timber.

The unique "checkerboard" arrangement of the O&C lands created by the original grants has added to the complexities of their management. Advantages of a more consolidated land pattern for the O&C lands were recognized by Congress through enactment of the O&C Exchange Act of 1939, and Public Law 426 enacted in 1954. Under

(Continued on page 14)



UP! UP! UP! High at the top of a forest giant a daring high climber tops a spar tree.

FORESTS FOR TOMORROW

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the authority of these statutes, 352,285 acres have been acquired and 322,334 acres have been transferred to other ownerships to consolidate the O&C lands and simplify their administration.

August 28, 1957, marked the 20th anniversary of management of the O&C and CBWR grant lands.

In observance of this date, Director Edward Woozley, of the Bureau of Land Management, along with other BLM officials and members of the O&C Advisory Board, visited representative areas of the O&C lands to see to what extent the aims of Congress expressed in the act of August 28, 1937, have been accomplished.

In this farsighted legislation Congress directed the Secretary of the Interior to manage the O&C lands. . . .

for permanent forest production; to sell, cut and remove the timber in conformity with the principle of sustained yield for the purpose of providing a permanent source of timber supply, protecting watersheds, regulating streamflow, contributing to the economic stability of local communities and industries and providing recreational facilities.

By this act Congress also sought to have the O&C lands yield an income to local governments; reimburse the United States Treasury for deficits created by acquiring the property and holding it during the years of low income; and make the enterprise self-sustaining.

The group saw fine stands of second-growth timber growing from seed cast by trees left for this purpose during earlier logging operations. They also saw other recently cutover areas supporting a new crop of timber established by artificial seeding and hand planting, timber stand improvement practices, evidences of access road construction, fire protection, and other intensive forest management techniques being applied to the O&C lands. The visitors concluded that resource management practices on the O&C lands today exceed even the most optimistic visions of the proponents of the 1937 act.

The group was also informed of other significant resource management achievements during this 20-year period of growing, resource management of the O&C lands. Management accomplishments have been manifold.

Through its management program the Bureau has increased the annual allowable cut from less than 500 million to more than 692 million board feet as a result of an intensive inventory of the timber resources.

A realistic timber sales technique has been developed which makes O&C timber available to any prospective purchaser at open competitive bidding following public notice of annual timber sale plans and advance notice of individual sales.

More than 1,000 miles of logging roads on O&C lands or on acquired easements has been con-

structed under the terms of O&C timber sale contracts.

The Bureau has completed or commenced grading 157 miles and surfacing 101 miles access roads and 15 bridges with appropriated funds, and prepared plans for construction of an additional 600 miles of such roads.

More than 1,200 miles of privately owned logging roads have been made available for use by purchasers of O&C timber through negotiation of reciprocal right-of-way agreements.

The BLM forestry program has seeded or planted more than 33,000 acres of cutover, burned or otherwise nonforested lands, and put into effect an accelerated plan to reforest 200,000 acres during the next 5 years.

The Bureau of Land Management has acquired 352,285 acres and transferred 322,334 acres to other ownerships through 80 exchanges to consolidate O&C lands and simplify their administration.

An integrated program protects the lands and resources from fire, disease, insects, and unauthorized use.

A comprehensive approach to forest management programs for multiple resource use promotes watershed protection, grazing, recreation, and other related uses compatible with good forest management.

The financial record of the O&C lands during the past 20 years parallels the resource management record. In 1937 the O&C fund in the United States Treasury showed a deficit of approximately \$10.5 million. By 1957 more than \$132 million had been collected from sales of about 9 billion board-feet of O&C timber. Approximately \$71 million of these receipts have been distributed to the O&C counties; more than \$13 million were appropriated for management of the resources; \$10.5 million were used to liquidate the deficit which was outstanding in 1937; and more than \$15 million were returned to the Treasury as net revenue.

Even greater local and national benefits from the O&C lands and other forest lands under BLM jurisdiction are expected in the future.

During and following World War II, western Oregon has experienced great increases in population and industry. Resource use demands (in addition to timber) on the O&C lands have increased proportionately. At least 150 community or fish hatchery watersheds now contain O&C lands. Extensive areas of these lands are favorably situated for hunting, fishing, camping, and other recreational uses.

In recognition of these multiple resource use needs the Bureau has developed various multiple-use programs which take into consideration all the uses involved. These programs also plan for potential or future multiple uses. An example is a recent agreement with the National Park Service which provides for inventorying the recreational potential of the O&C lands and preparing

plans and recommendations for recreational facilities to meet estimated future needs.

The Bureau of Land Management is proud of its record in management of the O&C lands. Through continued review and evaluation of past experiences, application of the newest and most efficient resource management techniques and fullest possible awareness of potential needs, the Bureau expects that the next 20 years' achievements in resource management on the O&C lands will surpass even those of the past two decades.

End

ACTIVE ACRES

(Continued from page 11)

continental railway lines, has been officially designated as the "Golden Spike National Historic Site."

Secretary of the Interior Fred A. Seaton made the designation by signing an order to that effect. He previously had signed a cooperative agreement with the parties concerned providing for the preservation and public use of the historically significant site in non-Federal ownership. Both actions were taken under authority of the Historic Sites Act of August 21, 1935.

The original golden spike ceremony 88 years ago celebrated the culmination of construction of 1,800 miles of railway in approximately 6½ years to form a junction of the Union Pacific Railway from the East and the Central Pacific Railway from the West, completing the transcontinental line.

Men of three continents—America, Asia, and Europe—had labored against tremendous ob-

stacles to build the line after President Lincoln had signed the Railroad Act of 1862. Subsequent acts provided for grants of public lands and free construction materials. The Advisory Board on National Parks, Historic Sites, Buildings, Monuments, recognizing the national importance of the first transcontinental railroad and the significance of the Promontory site ceremony, had recommended establishment of the Golden Spike National Historic Site. The tie-in of the East with the West through the railway line marked the beginning of a new era in development of the country by establishing a practical means of trade and commerce between the Atlantic and Pacific coasts.

The little village that sprang up at Promontory, Utah, immediately after completion of the Lucin Cutoff (across Great Salt Lake) in 1903, which shortened the line, and in 1940 the "Golden Spike" route around the north end of Great Salt Lake was abandoned. The original rails along the right-of-way within the site area were removed in 1942 to aid the World War II effort.

The Golden Spike National Historic Site is located north of Great Salt Lake and 31 miles from Brigham City, Utah. It is about 20 miles west of Corinne, Utah, which was the last town to be built eastward along the railway line before its completion.

The spike used in the 1869 ceremony was made of California gold. It was willed to Stanford University, California, by Leland Stanford, who was president of the Central Pacific Railway Co. The 5½-inch-long spike, which weighs 14 ounces, is currently on display in the Stanford Museum. Assayists have indicated that it contains about 10 ounces of gold and has a monetary value of \$350.

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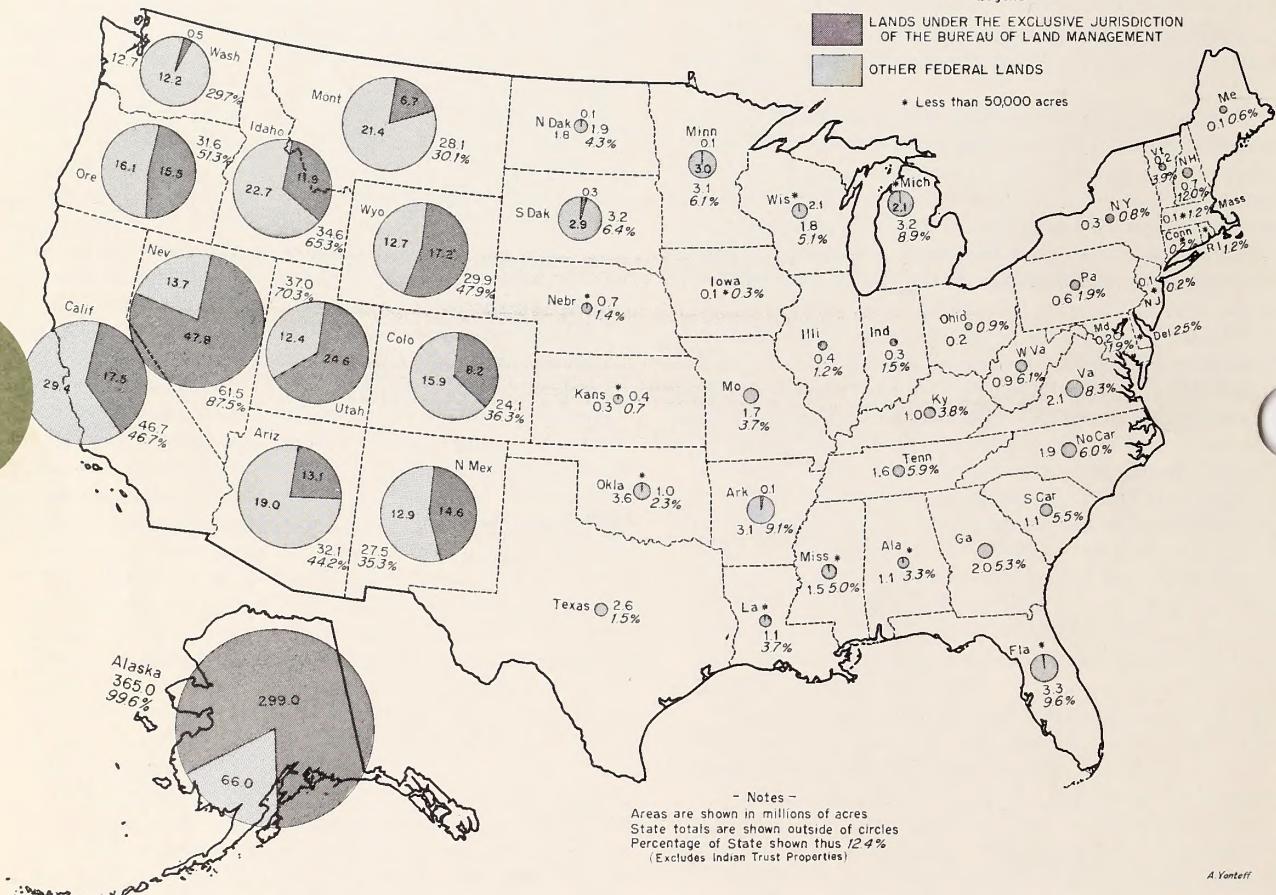
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- Legend -

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* Less than 50,000 acres



- Notes -
Areas are shown in millions of acres
State totals are shown outside of circles
Percentage of State shown thus 1/2 4%
(Excludes Indian Trust Properties)

A. Yonterf